

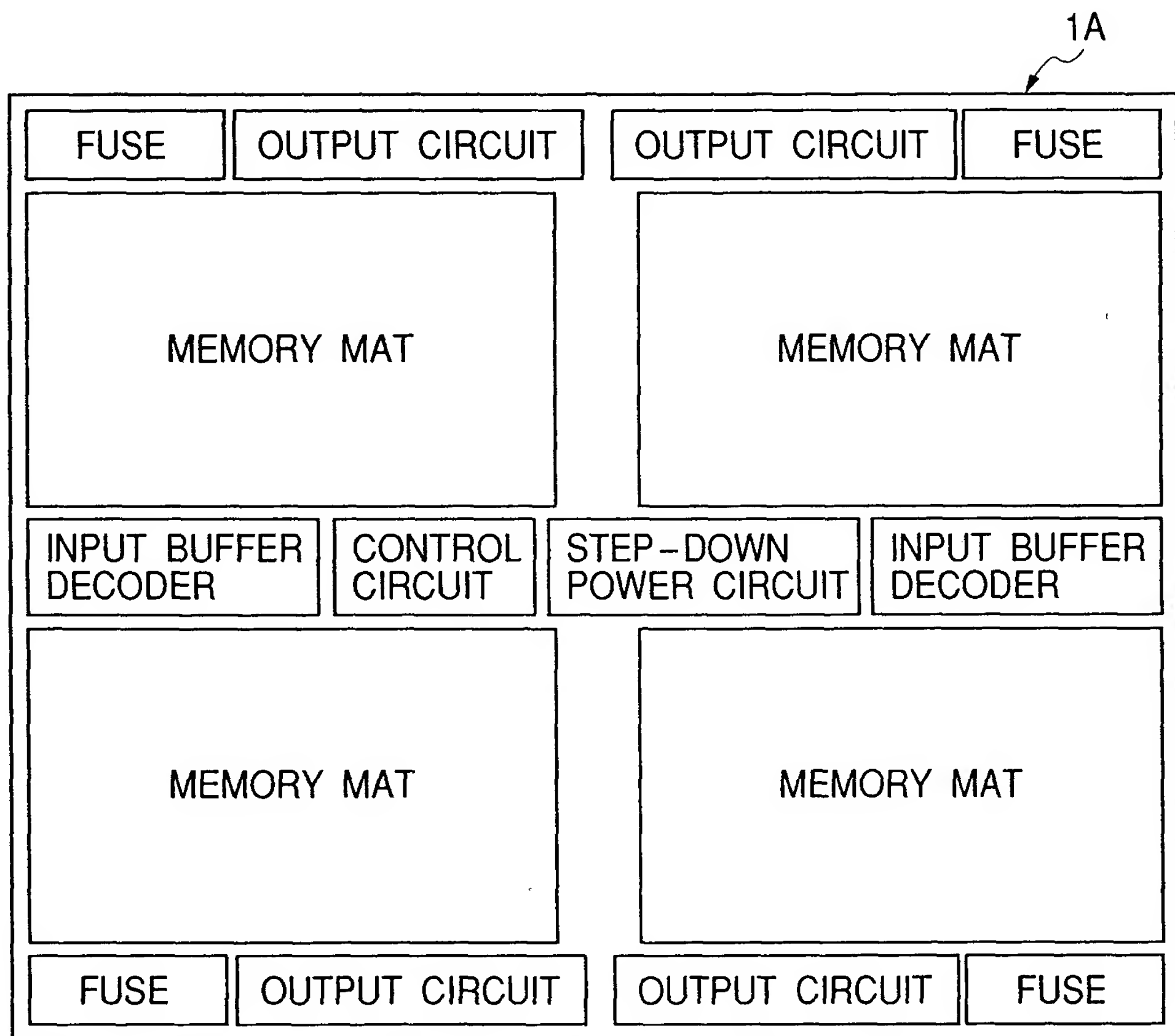
FIG. 1

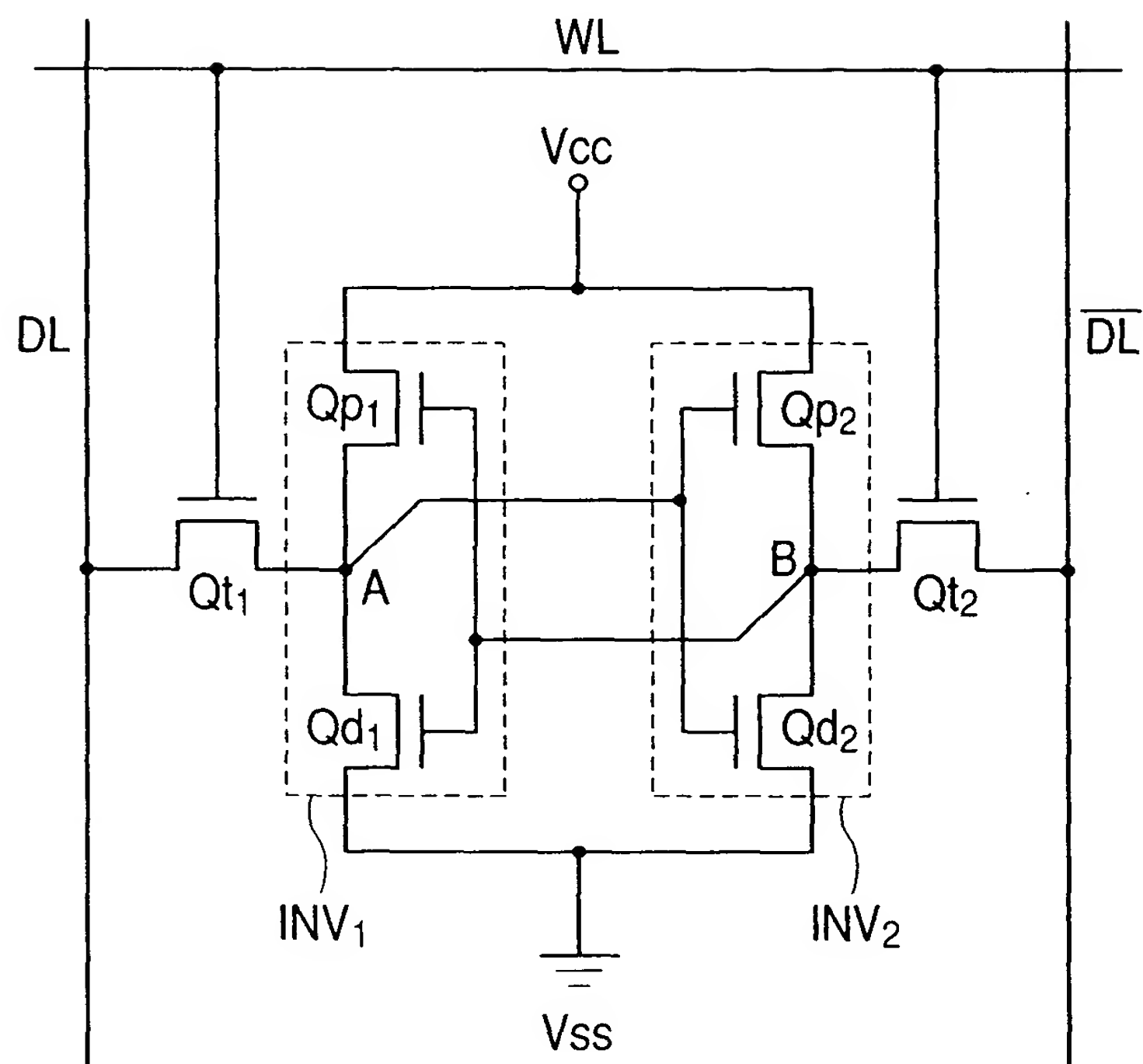
FIG. 2

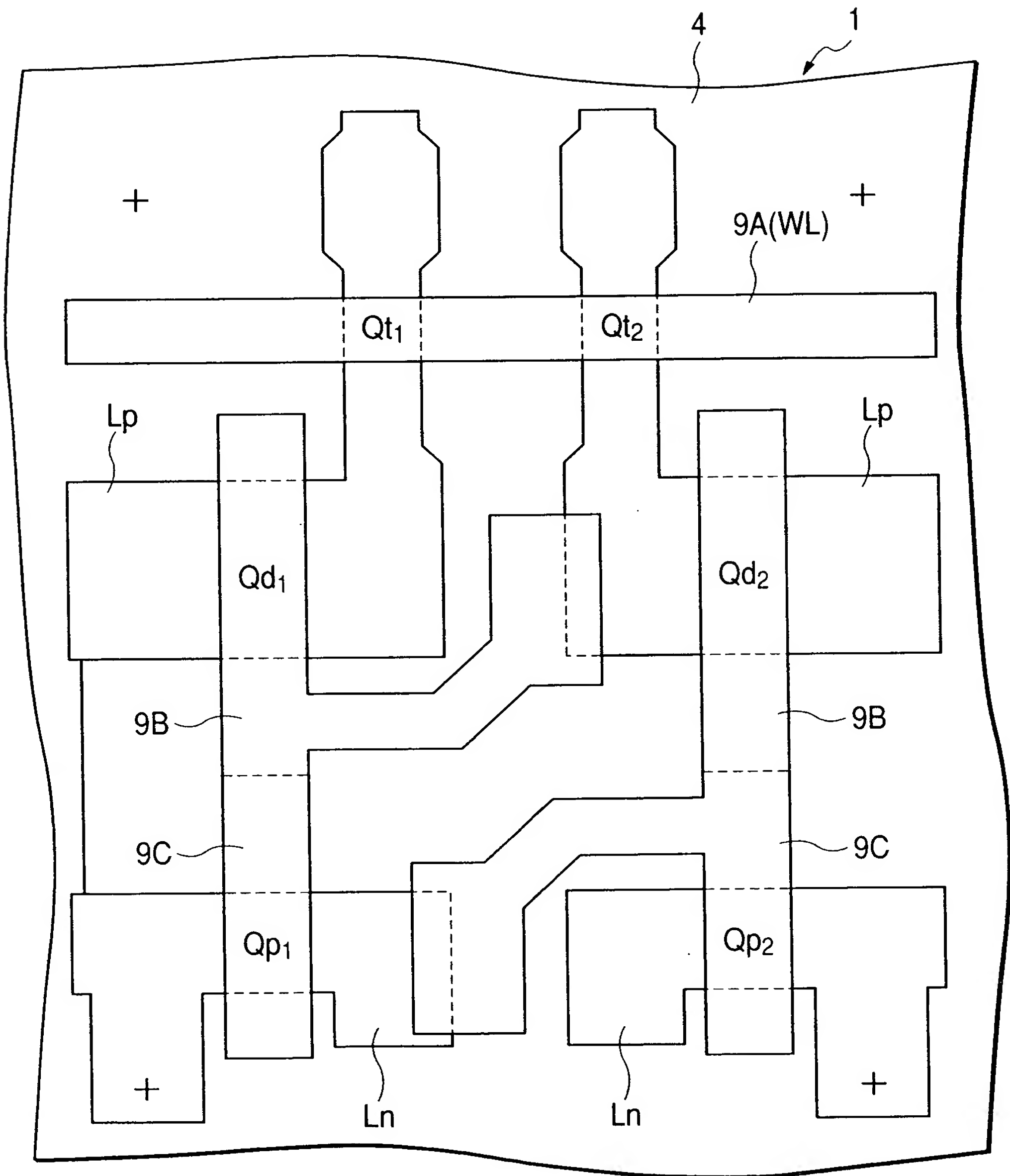
FIG. 3

FIG. 4

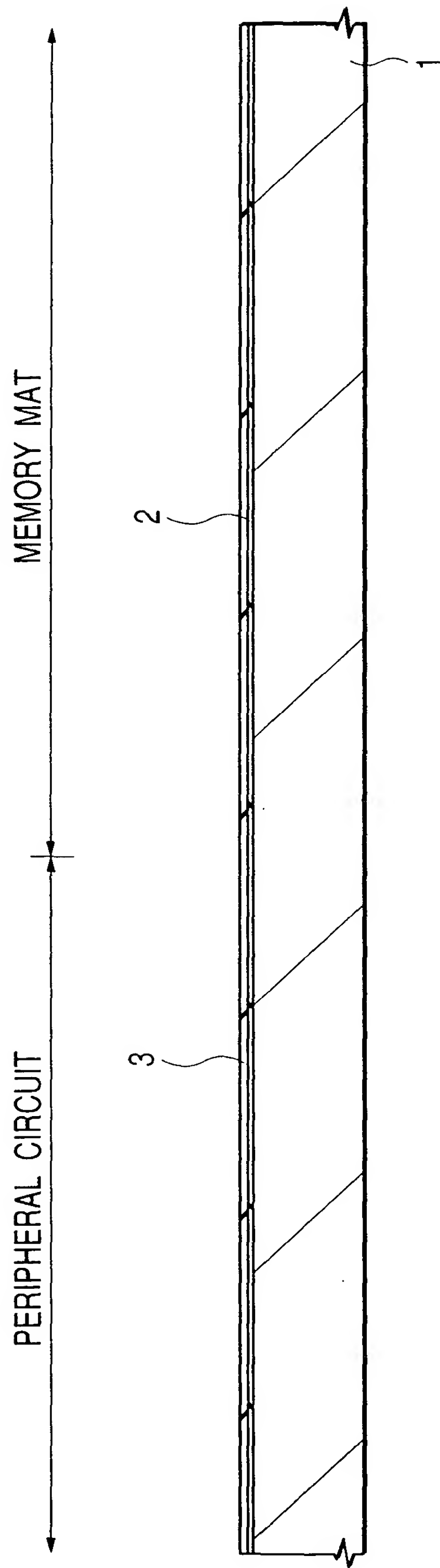


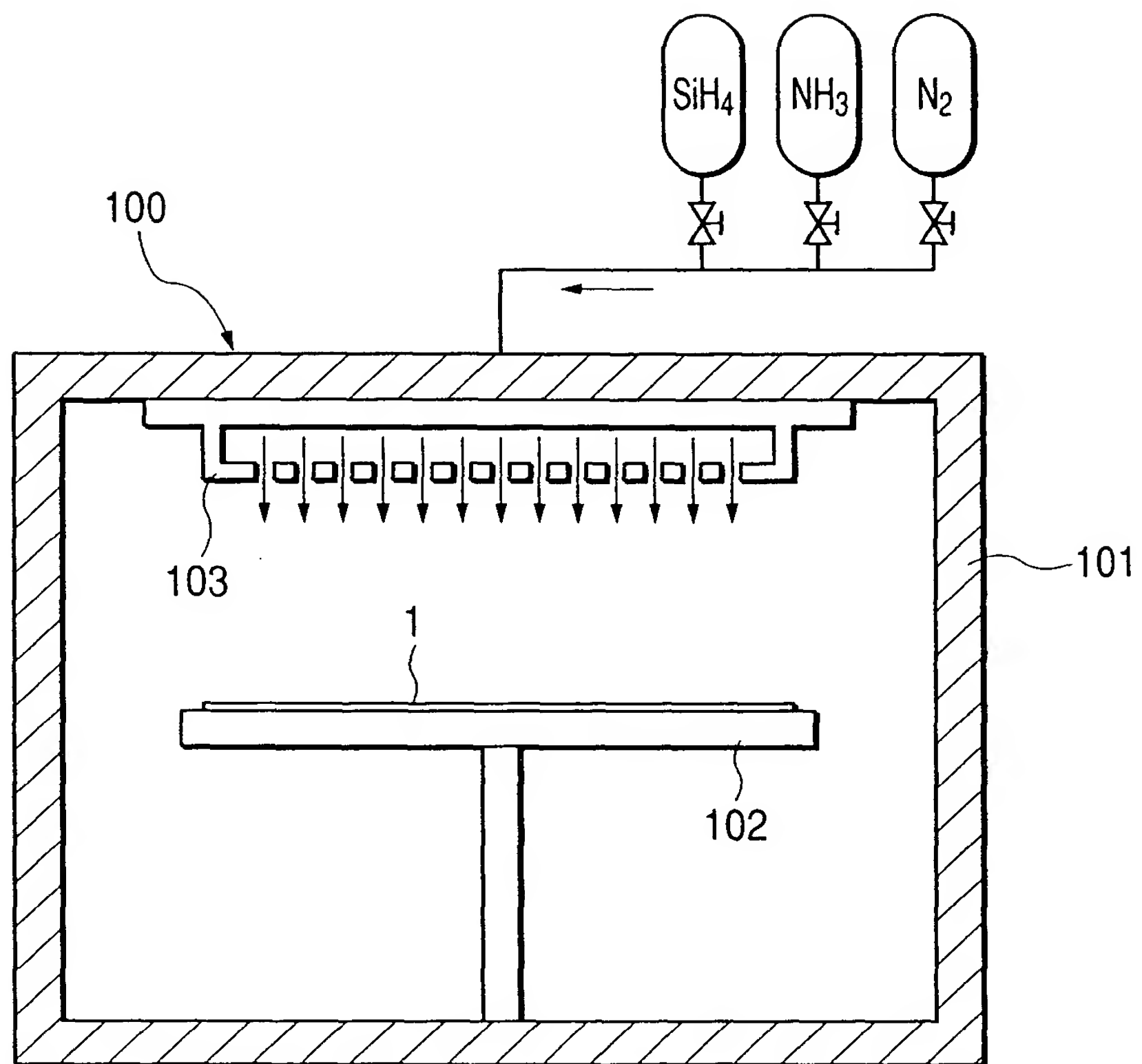
FIG. 5

FIG. 6

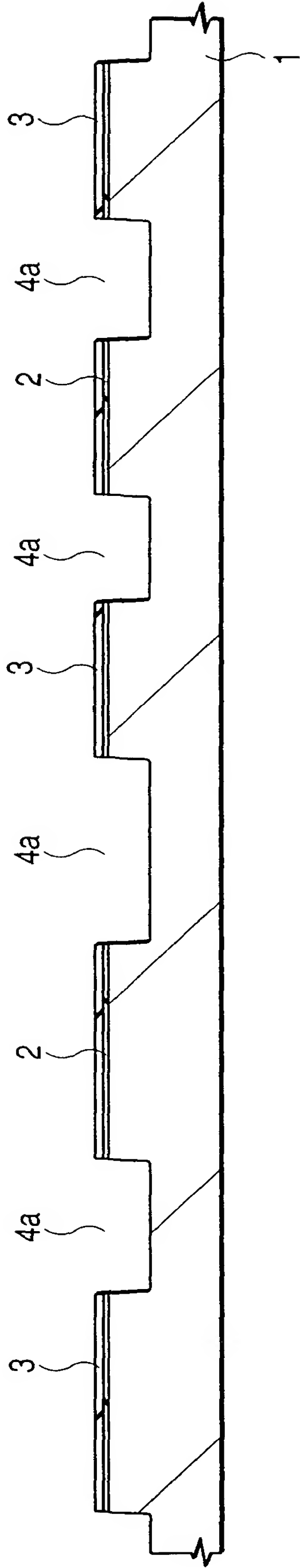


FIG. 7

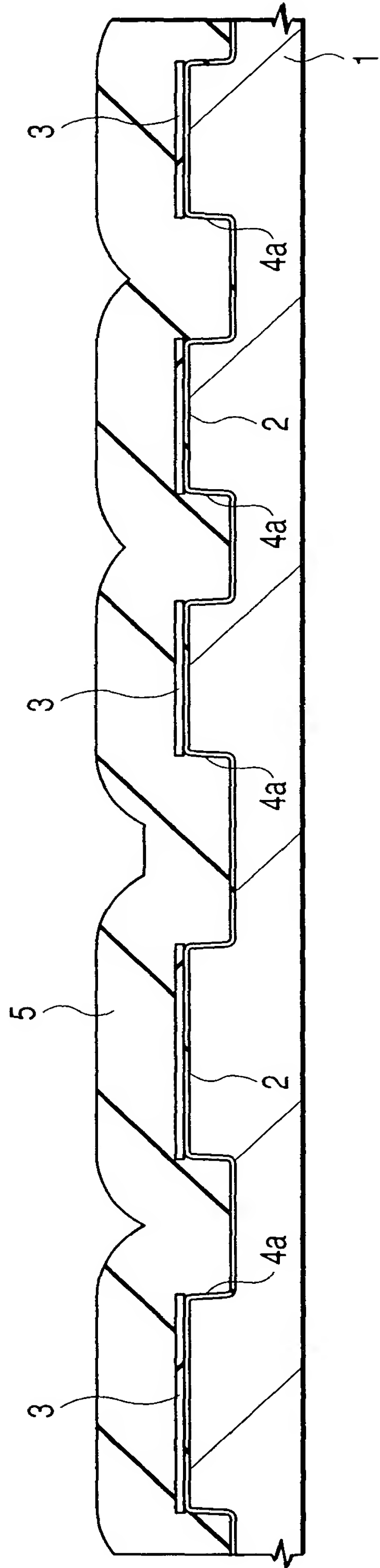


FIG. 8

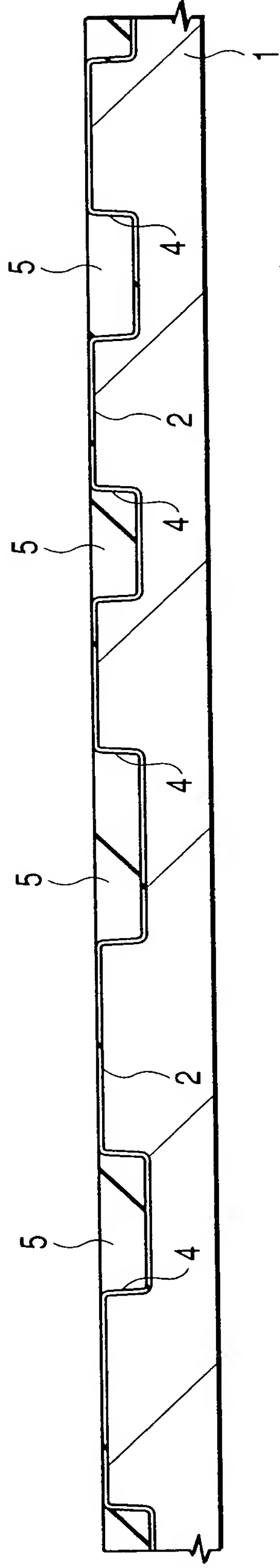


FIG. 9

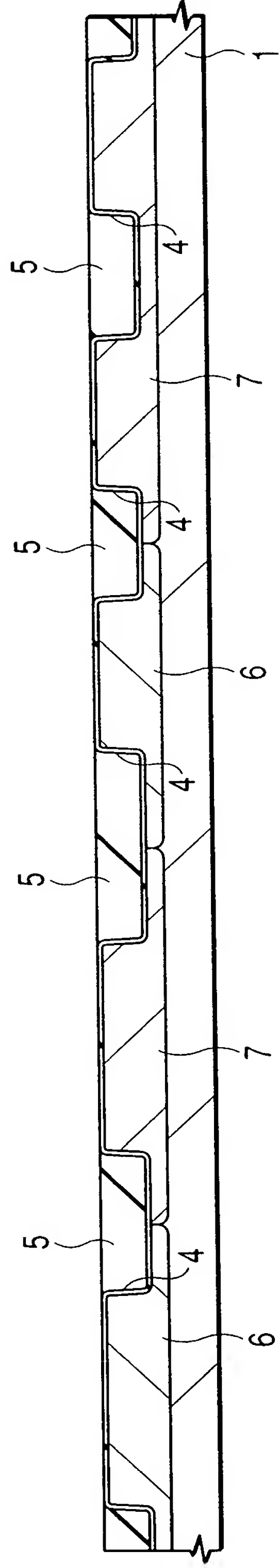


FIG. 10

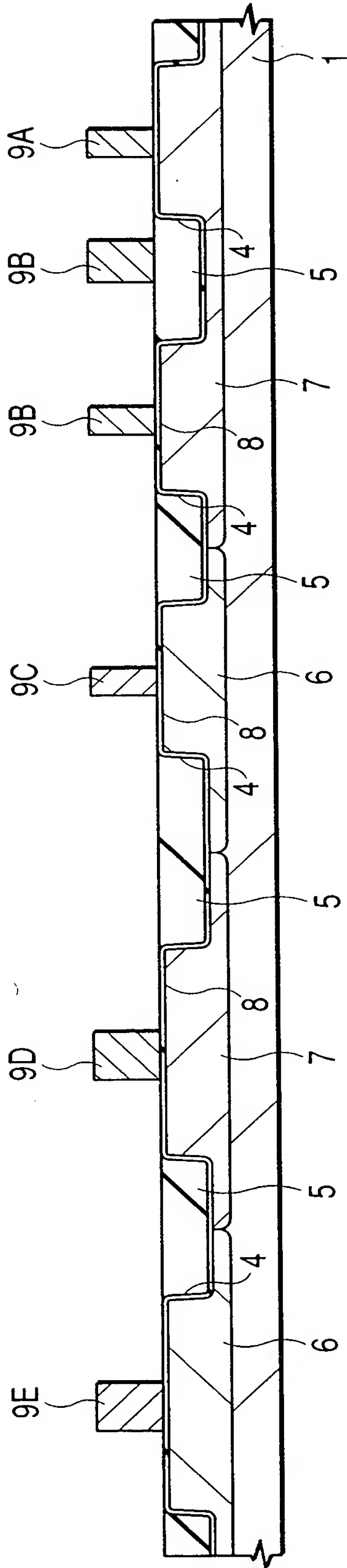


FIG. 11

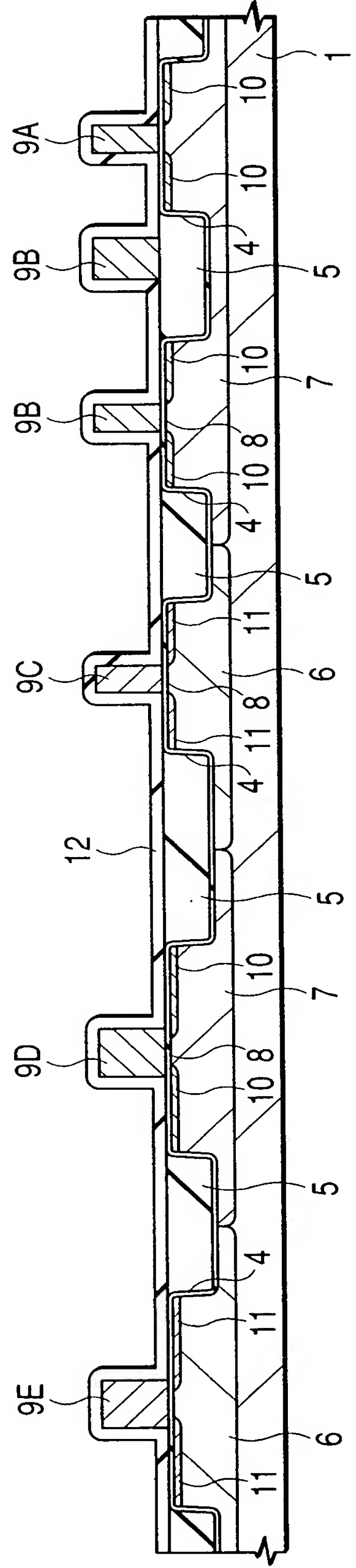


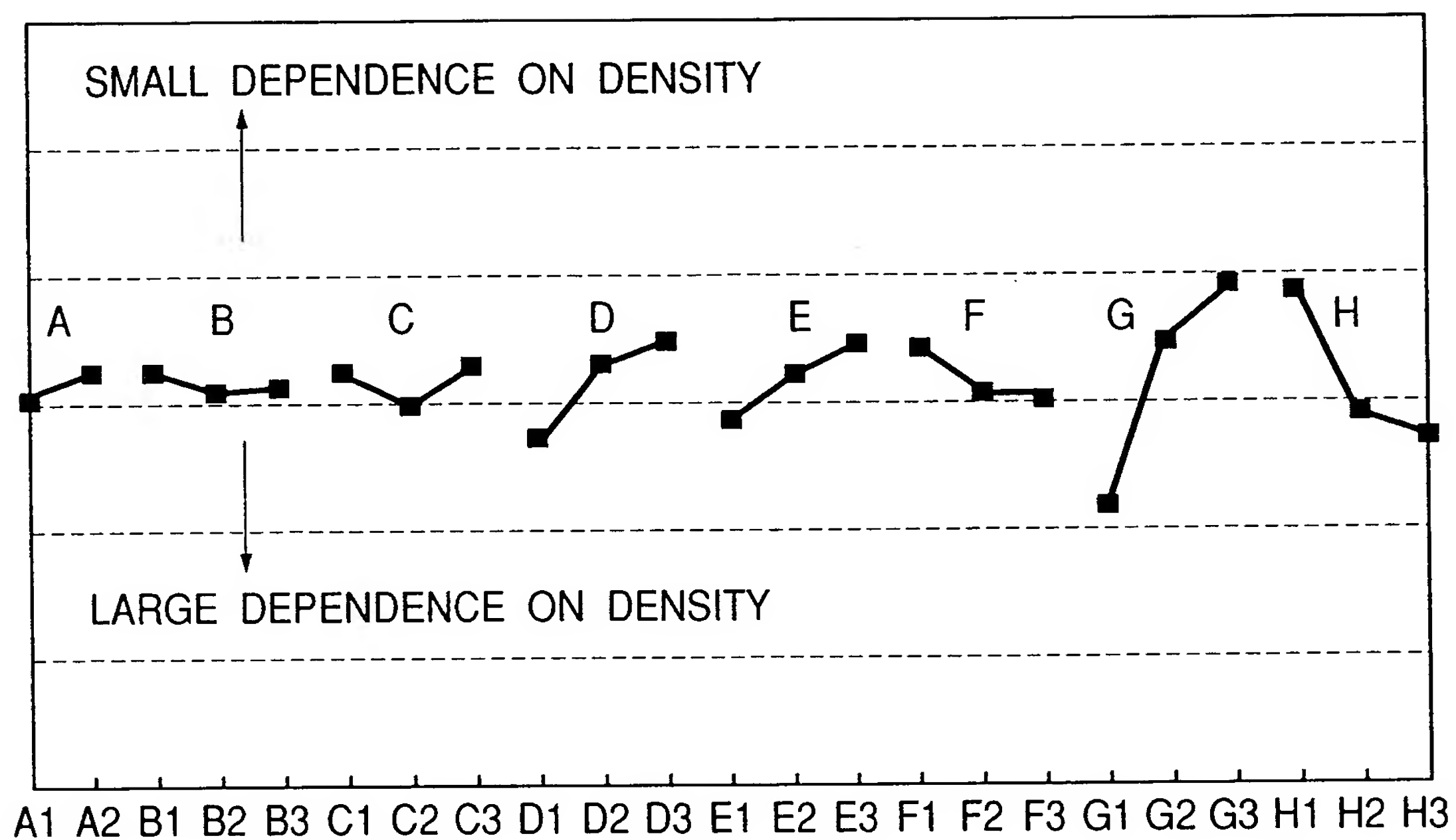
FIG. 12

FIG. 13

	A	B	C	D	E	F	G	H	A ANNEALING TIME OF NH ₃ (sec.)	B WALL TEMP. (°C)	C DISTANCE BETWEEN ELECTRODES	D FILM FORMING PRESSURE (Torr)	E FILM FORMING TEMPERATURE (°C)	F N ₂ FLOW RATE (sccm)	G NH ₃ FLOW RATE (sccm)	H SiH ₄ FLOW RATE (sccm)
TM9	1	1	1	1	1	1	1	1	0	25	500	200	700	5000	1000	20
TM7	1	1	2	2	2	2	2	2	0	25	550	275	750	7000	3000	45
TM11	1	1	3	3	3	3	3	3	0	25	600	350	800	9000	5000	70
TM5	1	2	1	1	2	2	3	3	0	30	500	200	750	7000	5000	70
TM1	1	2	2	2	3	3	1	1	0	30	550	275	800	9000	1000	20
TM3	1	2	3	3	1	1	2	2	0	30	600	350	700	5000	3000	45
TM15	1	3	1	2	1	3	2	3	0	35	500	275	700	9000	3000	70
TM17	1	3	2	3	2	1	3	1	0	35	550	350	750	5000	5000	20
TM13	1	3	3	1	3	2	1	2	0	35	600	200	800	7000	1000	45
TM12	2	1	1	3	3	2	2	1	60	25	500	350	800	7000	3000	20
TM10	2	1	2	1	1	3	3	2	60	25	550	200	700	9000	5000	45
TM8	2	1	3	2	2	1	1	3	60	25	600	275	750	5000	1000	70
TM2	2	2	1	2	3	1	3	2	60	30	500	275	800	5000	5000	45
TM4	2	2	2	3	1	2	1	3	60	30	550	350	700	7000	1000	70
TM8	2	2	3	1	2	3	2	1	60	30	600	200	750	9000	3000	20
TM18	2	3	1	3	2	3	1	2	60	35	500	350	750	9000	1000	45
TM14	2	3	2	1	3	1	2	3	60	35	550	200	800	5000	3000	70
TM16	2	3	3	2	1	2	3	1	60	35	600	275	700	7000	5000	20

FIG. 14

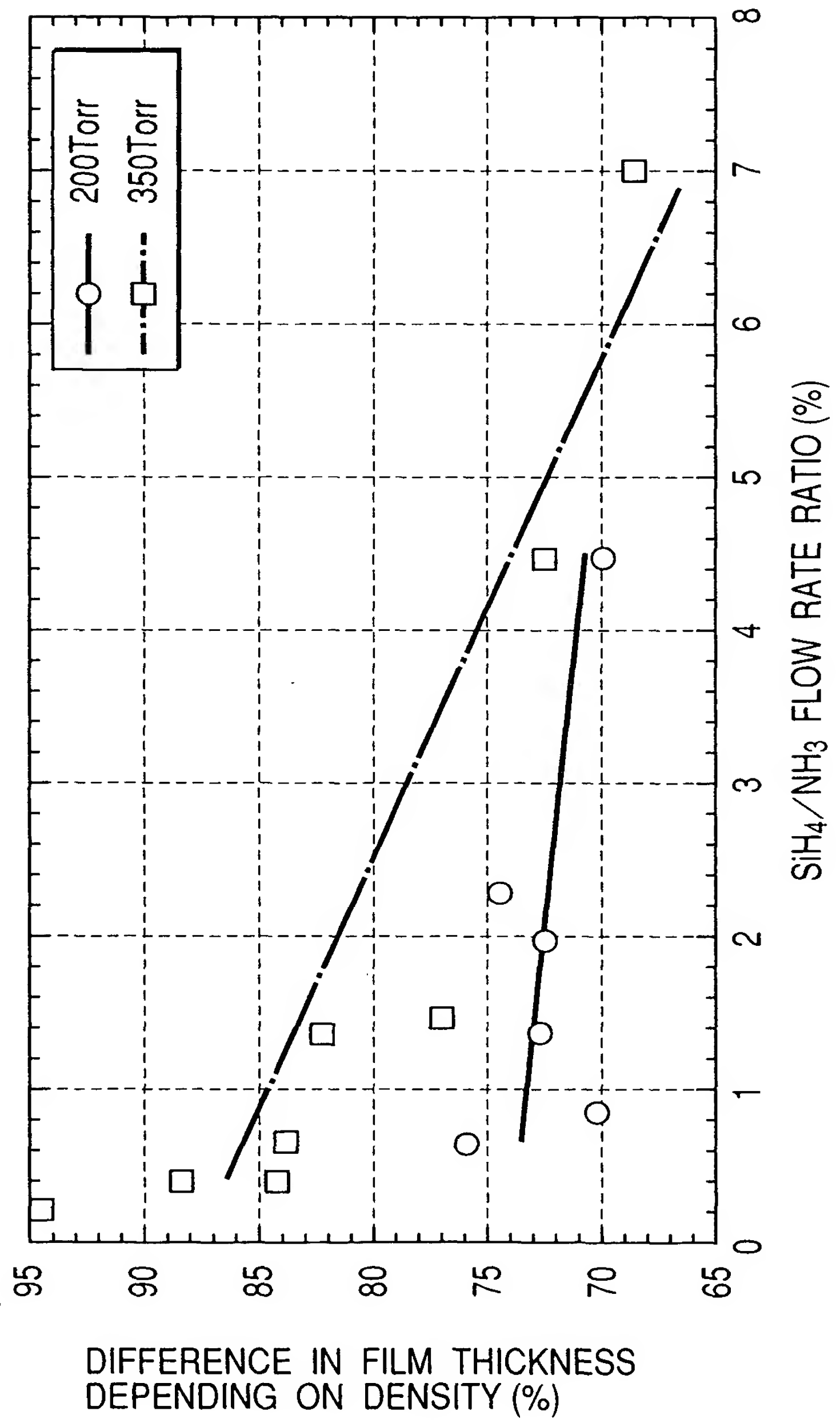


FIG. 15

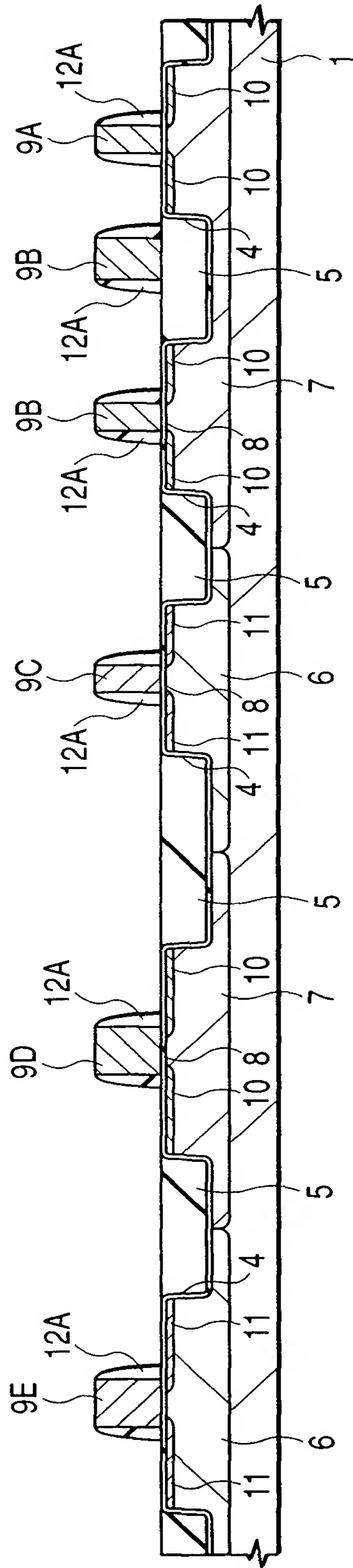


FIG. 16

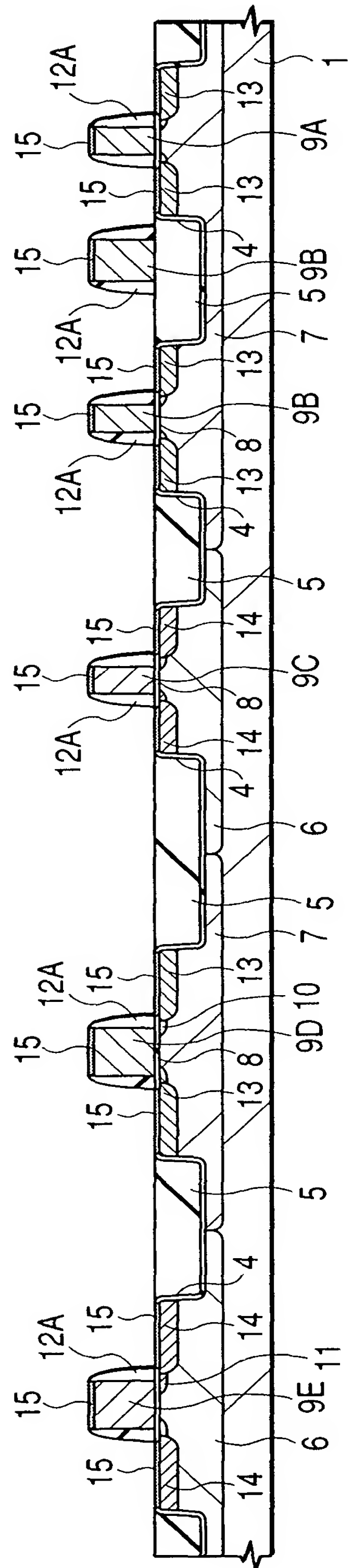


FIG. 17

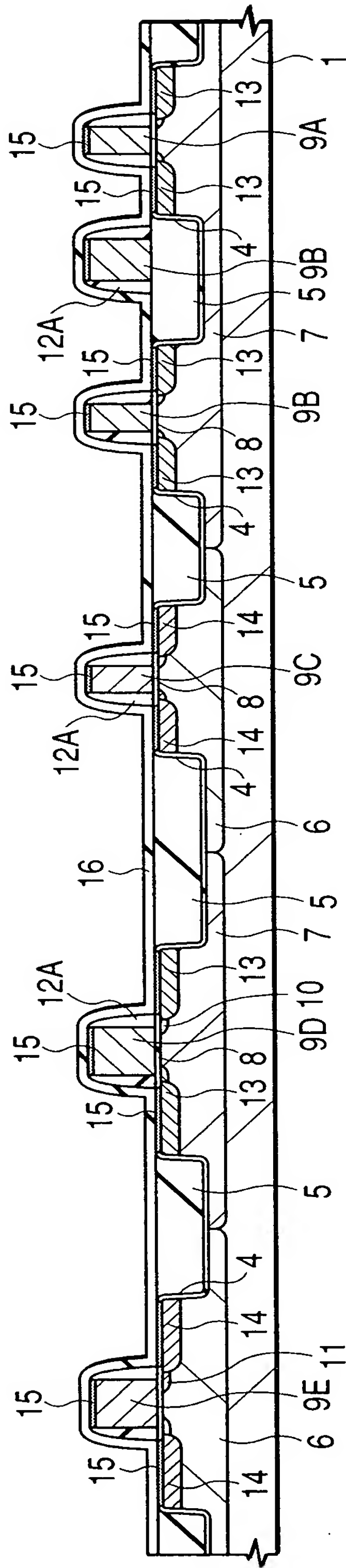


FIG. 18

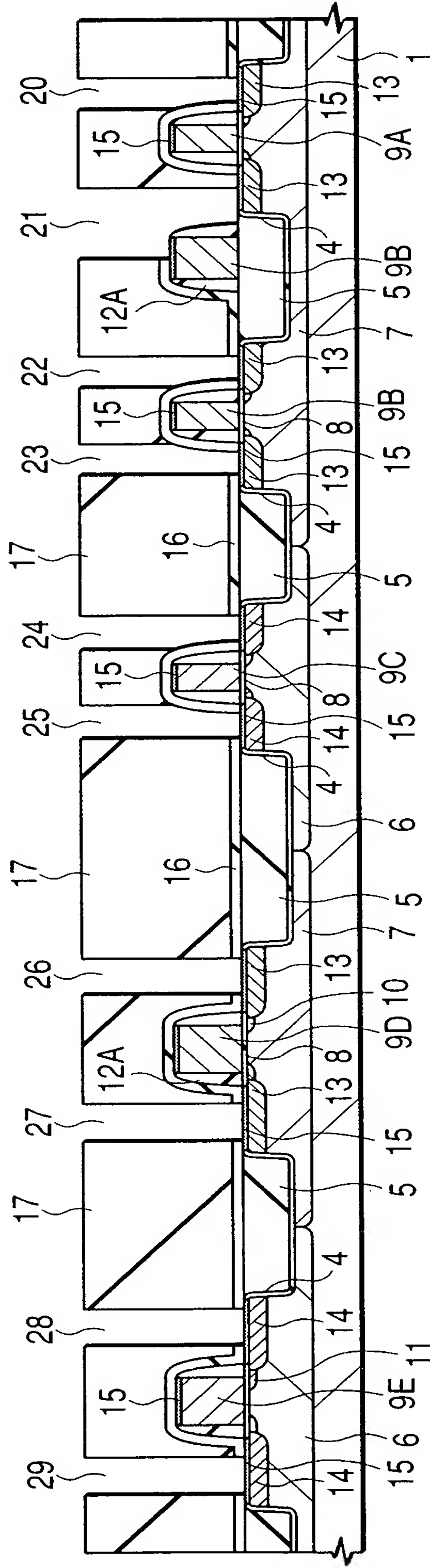


FIG. 19

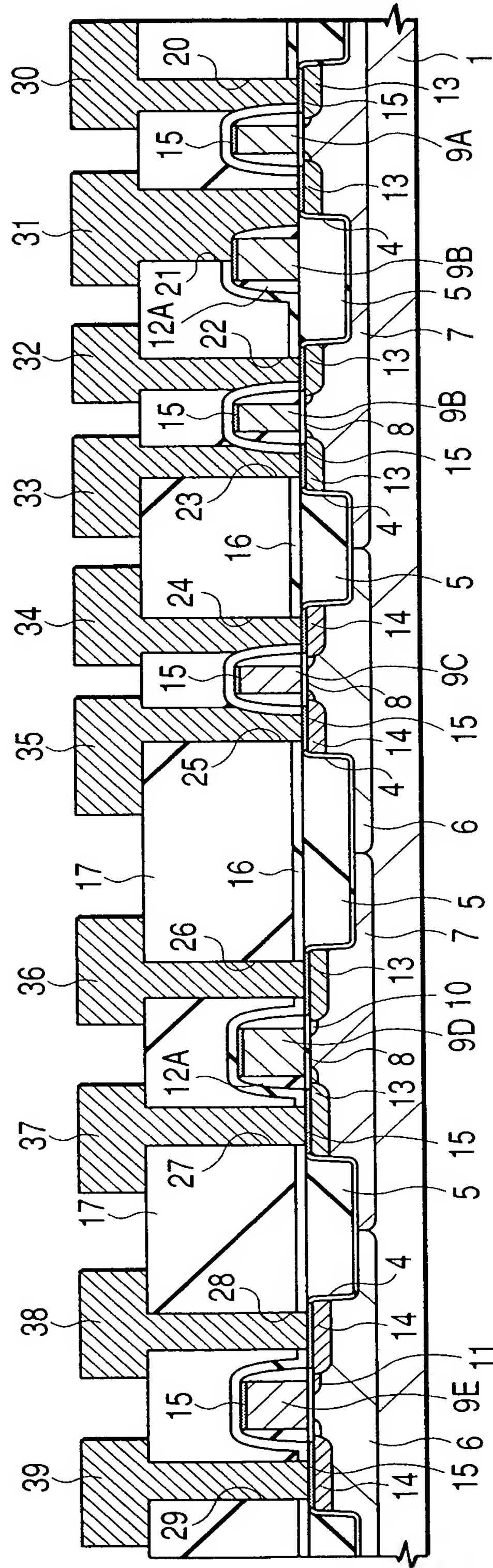


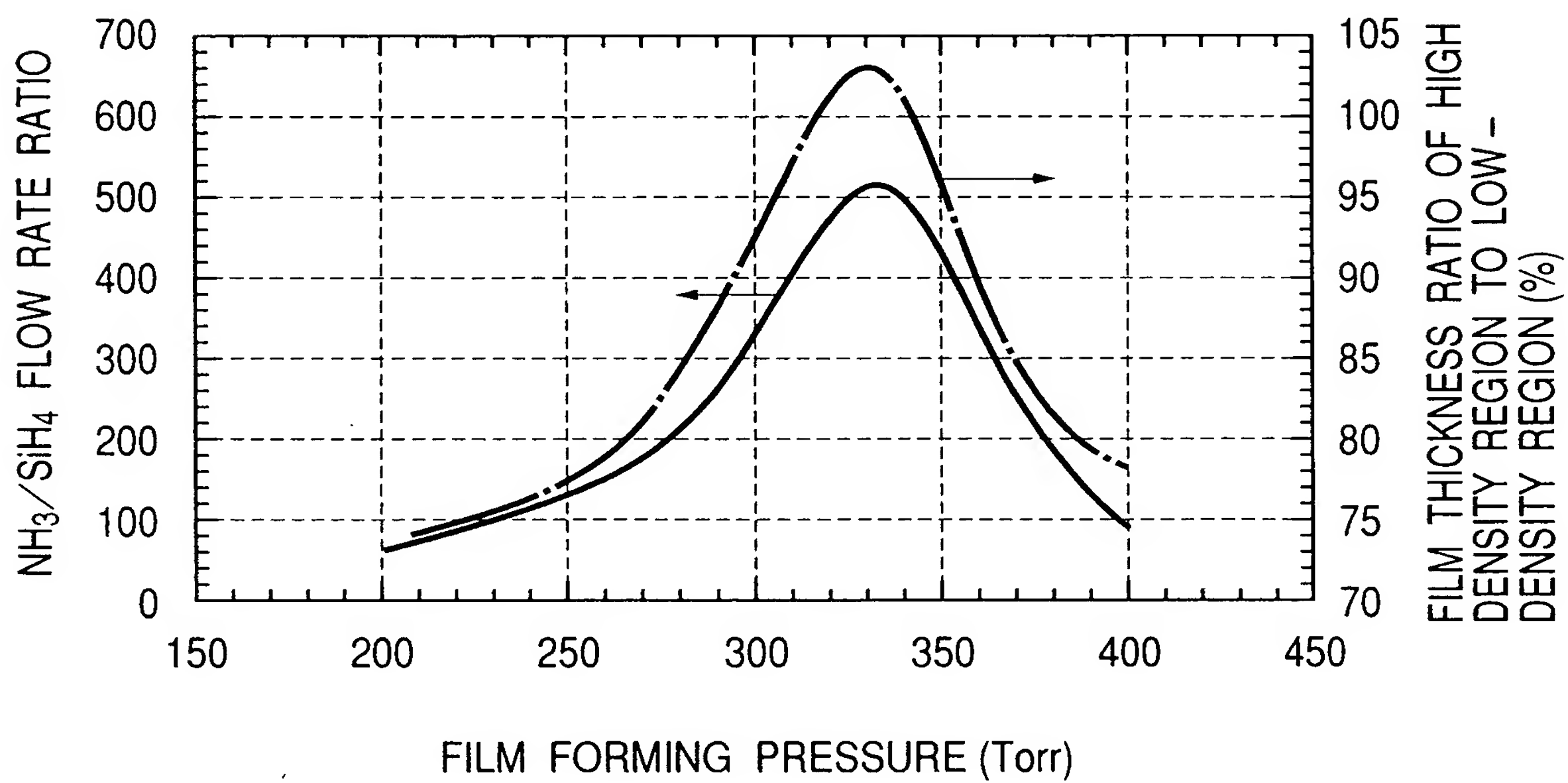
FIG. 20

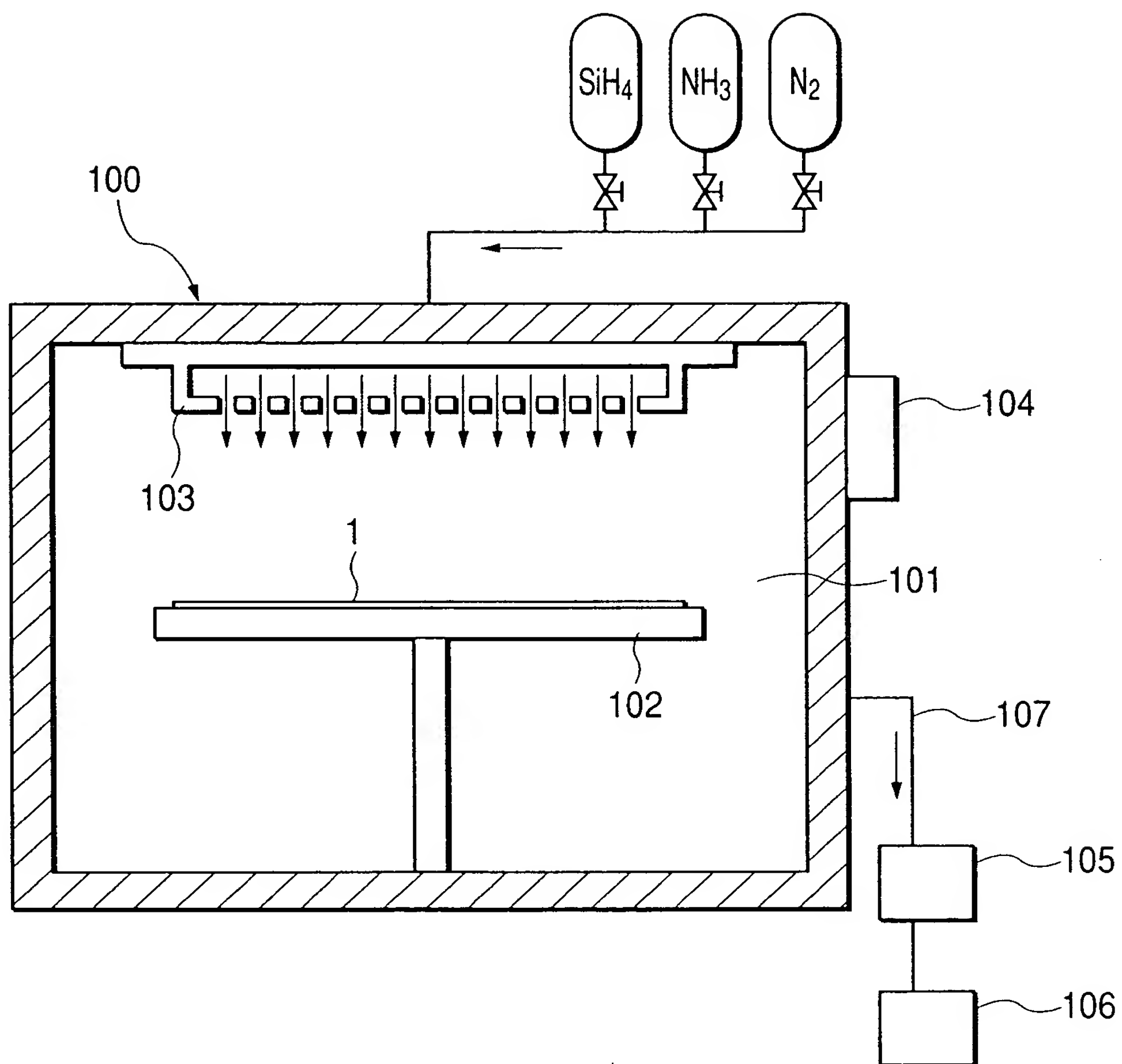
FIG. 21

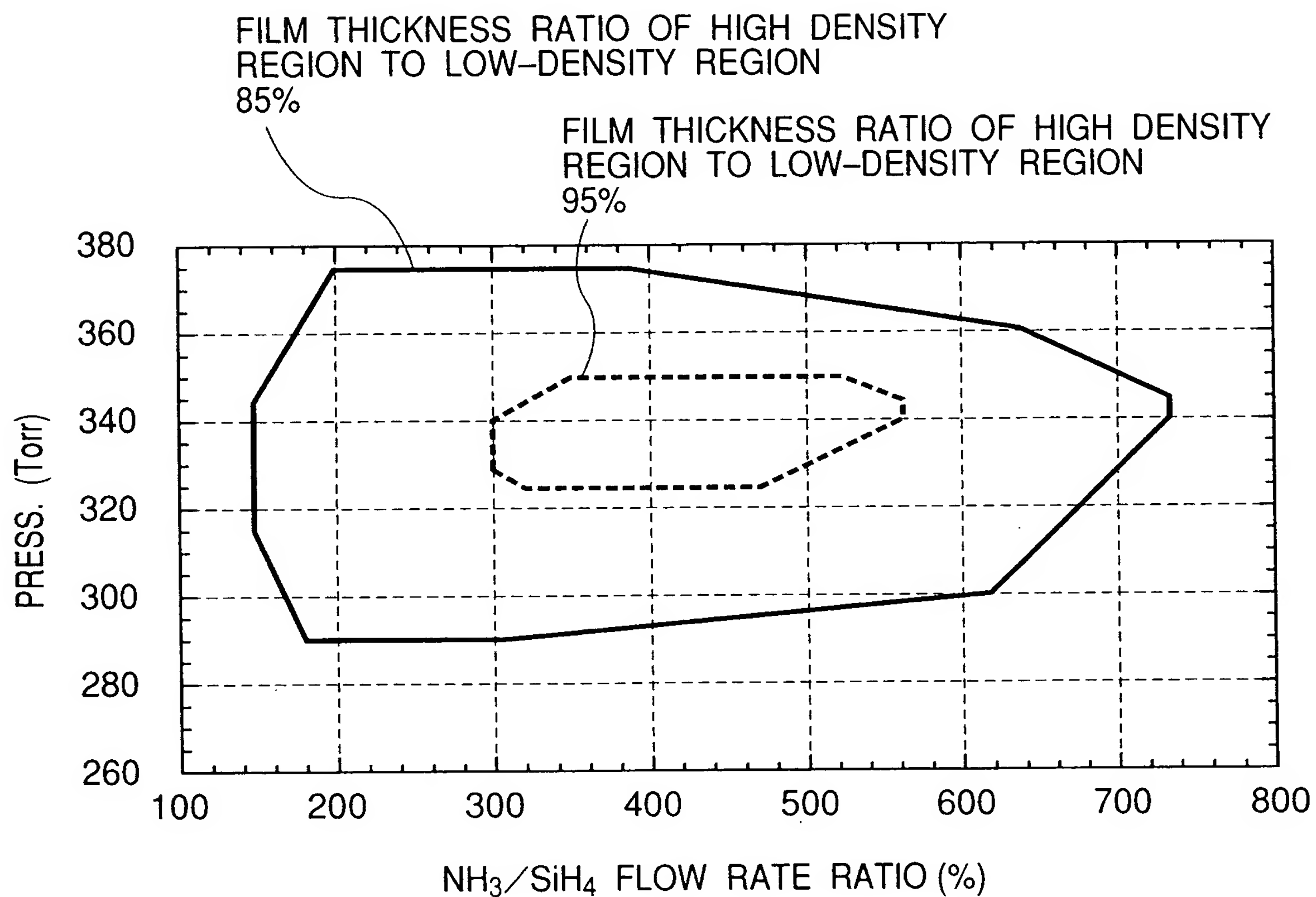
FIG. 22

FIG. 3 REGIONS OF AN NH₃/SiH₄ FLOW RATE RATIO AND A FILM FORMING PRESSURE PERMITTING A FILM THICKNESS RATIO OF HIGH DENSITY REGION TO LOW-DENSITY REGION NOT LESS THAN 85% AND NOT LESS THAN 95%

FIG. 23(a)

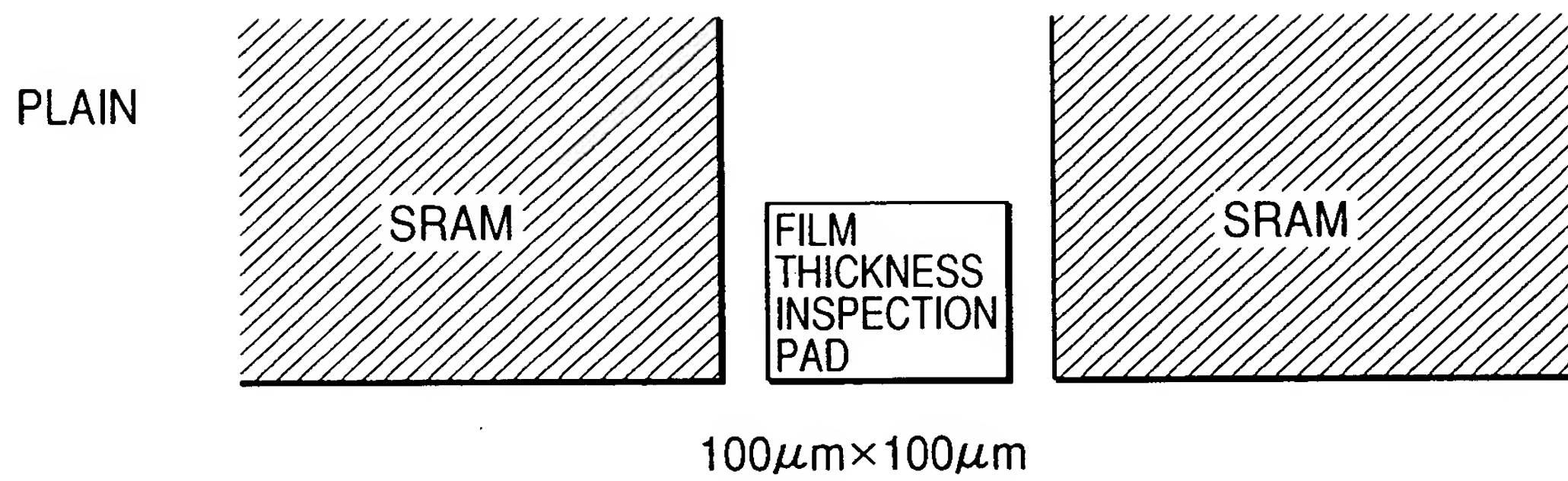


FIG. 23(b)

CROSS - SECTION

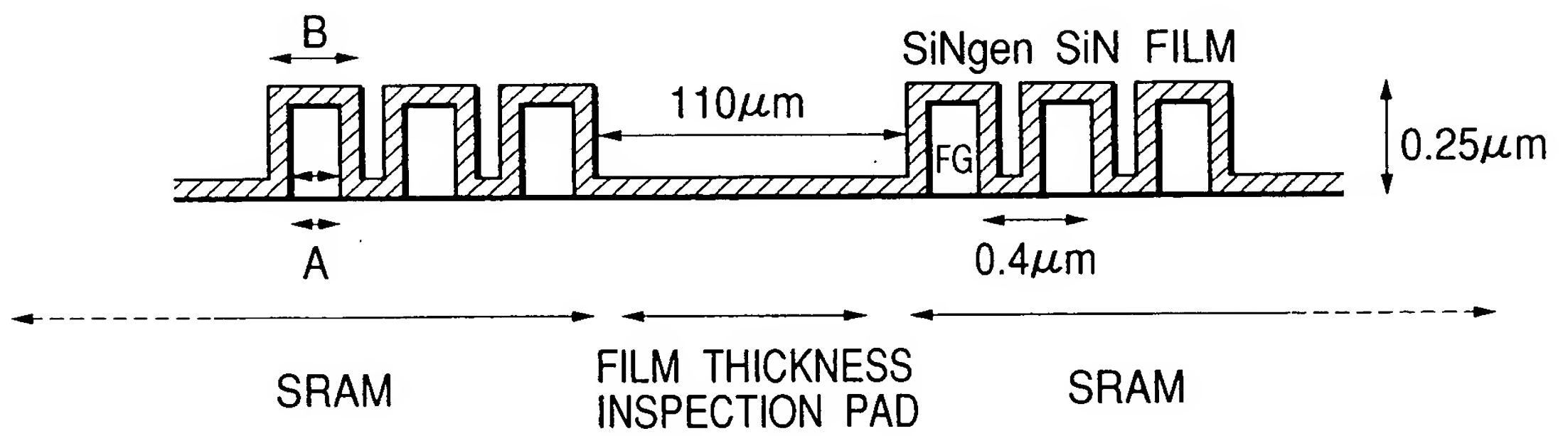


FIG. 24